

Office Action Summary

Application No.

10/017,203

Applicant(s)

HSU ET AL.

Examiner

Gregory E. Webb

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2-4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,203	12/14/2001	Feng-Lung Gordon Hsu	C6629(V)	1159

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EXAMINER

WEBB, GREGORY E

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 09/10/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites the limitation "the water-soluble body". There is insufficient antecedent basis for this limitation in the claim. The applicant has not defined the term. But the applicant refers to the feature as though it were previously defined. It should also be noted that the applicant's specification makes absolutely no mention of "the water-soluble body." As the term "body" is very broadly defined by the dictionary and as the applicant has not defined the term, the examiner will not lend any significant patentable weight to this term. It is not clear if the term "body" refers to some type of container (such as definition 5 below) or is describing the composition as a whole (such as definition 4 below) or the composition within a container (such as definition 6) or with a certain type of consistency (such as definition 8). Below is the full definition of the term "body."

body *n. pl. bodies*

1.
 - a. The entire material or physical structure of an organism, especially of a human or animal.
 - b. The physical part of a person.
 - c. A corpse or carcass.

Art Unit: 1751

2.
 - a. The trunk or torso of a human or animal.
 - b. The part of a garment covering the torso.
 3.
 - a. A human; a person.
 - b. A group of individuals regarded as an entity; a corporation.
 4. A number of persons, concepts, or things regarded as a group: *We walked out in a body.*
 5. The main or central part, as:
 - a. Anatomy. The largest or principal part of an organ; corpus.
 - b. The nave of a church.
 - c. The content of a book or document exclusive of prefatory matter, codicils, indexes, or appendixes.
 - d. The passenger- and cargo-carrying part of an aircraft, ship, or other vehicle.
 - e. Music. The sound box of an instrument.
 6. A mass of matter that is distinct from other masses: *a body of water; a celestial body.*
 7. A collection or quantity, as of material or information: *the body of evidence.*
 8. Consistency of substance, as in paint, textiles, or wine: *a sauce with body.*
 9. Printing. The part of a block of type underlying the impression surface.
-
4. It is therefore suggested the applicant remove this term from the claim.
 5. Claims 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1751

6. The term "colored" in claim 11 is a relative term which renders the claim indefinite. The term "colored" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The examiner is not aware of any physical solid material which does not contain some "color". Specifically, the term "colored electrolyte" is so broad as to mean only "electrolyte" as all electrolytes impart color. All solid materials absorb at least some portion of light and produce an apparent "color." As the applicant has not clearly stated what "color" is intended, the examiner will consider all electrolytes to be to meet this limitation.

Claim Rejections - 35 USC § 102/103

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 1751

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-8, 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ginn (US 4,348,292).

12. Concerning the two phase composition, Ginn teaches in column 2 the following:

(4) The system of the present invention is especially adapted for single-use applications to provide a substantially homogeneous, dilute solution or dispersion of predetermined composition to be used for detergent, cleaning, or the like, purposes. The system comprises a fluid-tight container having at least two separate layers of liquid compositions therein, one of the layers comprising, as an essential ingredient, a predetermined quantity of a concentrate of at least one surfactant which is soluble or readily dispersible in a diluent such as water. Another of the layers in the container advantageously comprises, as an essential ingredient, a solution or dispersion, in the form of a concentrate, which incorporates a predetermined quantity of at least one detergent builder. The compositions of the separate layers in the container are of a character such that, if mixed together in their concentrated form, they would be incompatible or immiscible, and the resulting mixture would be non-homogeneous. The compositions of the separate layers, however, are so related as to the components, or ingredients, and proportions thereof that when essentially all of the liquid contents of the container are poured into a predetermined quantity of a diluent such as water, a final, essentially stable solution or dispersion is obtained in ready-to-use form. In marked contrast to typical homogeneous formulations, the active surfactant concentrate portion of the system, in most instances, will contain less than 10%, usually 4 or 5%, of water, and, in other cases, depending upon the nature of the ingredients employed, will contain no added water. The system can be formulated to provide, in ready-to-use form, stable solutions useful as hard surface

Art Unit: 1751

cleaners, degreasers, bowl cleaners, floor wax removers, liquid dishwashing detergents, commercial or household heavy duty laundry liquids, concentrated liquid hand soaps, carpet shampoo concentrates, high strength metal cleaners, car wash concentrates, and the like.

13. Concerning the contents of the builder layer, Ginn teaches in column 3 the following:

(12) By way of illustration, in formulating a builder concentrate layer for use with a surfactant concentrate layer intended for producing a stable detergent or cleaning solution for use as a hard surface cleaner, the active ingredients of the builder concentrate layer will advantageously comprise an alkali metal builder salt such as sodium or potassium carbonate, an aqueous solution of an alkali metal hydroxide exemplified by a 50% solution of potassium or sodium hydroxide, and a soluble aminopolycarboxylate salt such as an alkali metal salt of ethylenediaminetetraacetic acid. In formulating a builder concentrate layer for use with a surfactant concentrate layer to produce a ready-to-use solution to serve as a degreaser, the builder layer desirably will be formulated to include a polybasic organic acid such as citric acid, or an alkali metal salt of such an acid, an aqueous solution of an alkali metal hydroxide, an aminopolycarboxylate salt, and a small amount of a stabilizer such as polyvinyl pyrrolidone. Sufficient water is added to maintain the active ingredients comprising the builder concentrate layer in solution. Generally speaking, the proportion of active materials in the builder concentrate layer will range from about 20% to about 80%, usually about 30% to about 40%, by weight, of the aqueous concentrate builder layer.

14. Concerning the amount of surfactant and the dye, Ginn teaches in column 3 the following:

(10) The active surfactant ingredient, that is, the nonionic, anionic, cationic or amphoteric surfactant, or a compatible mixture thereof, employed in preparing the surfactant concentrate layer of the system comprises, as indicated hereinabove, a major proportion of the layer. The generally optimum objectives of the invention are attained with active surfactant concentrations of from about 50% to upwards of about 99%, by weight, of the surfactant concentrate layer. The finished surfactant concentrate layer desirably includes minor amounts of materials which will make the stable, ready-to-use solution prepared from the system of the present invention more effective and more attractive. The following are mentioned by way of example. A defoamer such as silicone and silicone emulsions, and fluorescers, perfumes and dyes. The concentration of such additives in the layer will range from about 0.01% to about 8 or 10%, by weight of the concentrate. Other additives, of course, can be used without departing from the spirit and scope of the invention.

15. Concerning the ratio of layers, Ginn teaches in column 4 the following:

Art Unit: 1751

(14) The volume ratio of surfactant concentrate layer to builder concentrate layer of the system of the present invention can range from about 1:9 to 9:1, again depending upon the end use of the stable solution produced by the system. The total volume of the concentrated layers in the container comprising the system can vary widely, again, depending upon the final use-dilution volume required. Generally speaking, for most purposes, the total volume of the concentrate layers will be of the order of 1 to 2 ounces up to a gallon for large scale cleaning operations. The use-dilution ranges, that is, the amount or volume of diluent such as water to be used in producing a stable ready-to-use solution with the concentrates comprising a particular system also will depend upon the end use of the solution. In broad terms, the use-dilution ranges for good performance will be of the order of about 1 of the concentrate system to about 30 to about 500 of water.

16. Concerning the container, Ginn teaches in column 5 the following:

(15) The fluid-tight containers comprising the system may be fabricated of glass or plastic. For average cleaning jobs, the containers advantageously will be in the form of a flexible, single-use bag or packet made of a thermoplastic sheet material such as polyethylene. Heat sealable containers of this type will contain from about 1 or 2 to about 6 ounces of the concentrate layers, and, while resistant to tearing, can be readily opened. The concentrate layers can be injected into the bag or packet, and the bag or packet heat sealed, with conventional equipment.

17. Concerning the hydrotrope, Ginn teaches in example III the use of monoethanolamine, in example IV the use of monoethanolamine, butyl cellosolve, in example V the use of isopropanol all examples of hydrotropes as required by claim 2. Support can be found in the abstract of Elko et al (US 5158612 A):

An improved compsn. contg. sulphated narrow range ethoxylated alcohols of formula: $\text{CH}_3(\text{CH}_2)_x\text{CH}_2(\text{R})_y\text{OSO}_3\text{-M}^+$ where $x = 4-10$; $\text{R} = \text{alkoxy}$; $y = 0-5$; $\text{M}^+ = \text{Na}$ or ammonium ions. The improvement comprises a distribution of mols of formula (II) having not more than 20 wt.% of mols with $y = 0$ and at least 45 wt.% with $y = 2$ or 3.

An aq. compsn. contg. a) 40-60 wt.% of molecules of above formula b) 5-20 wt.% of a hydrotrope chosen from MeOH, EtOH, isopropanol, ethylene glycol, propylene glycols, polyethylene and polypropylene glycols, monoalkyl ethers of ethylene glycol, alkyl polyglucosides and mixts. c) opt. a sequestering agent for divalent and higher valency metal ions.

Pref. the compsn. contains 40-60 wt.% of (II) where x is 6-8 and R is ethoxyl and 50 wt.% of (II) where y is 2 or 3, such that the average value of y is 2.2.

Art Unit: 1751

18. Concerning the ratio of surfactants, Ginn teaches in example IV a composition containing a ratio of anionic to nonionic surfactant of approximately 1:3.

19. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuller et al (US 6,180,587).

20. Concerning the multiple phases, Fuller teaches in column 1 the following:

(2) The two aqueous phases form distinct separate layers when in contact without agitation. Normally when a water-soluble polymer is present with a water soluble or dispersible surfactant (such as a nonionic ethoxylated surfactant) a single aqueous layer is formed. It has now been found that certain skin compatible polymers will not normally coexist in a single aqueous layer with a surfactant but will form a second layer, usually below that of the surfactant containing aqueous layer. It is believed that the property which separates this grouping of polymers from the ones that are compatible in one phase, is the hydrophilicity of the polymer. Those polymers which are highly hydrophilic will form a second aqueous phase. These polymers typically have no or very little cross-linking and no significant hydrophobic bonding. Examples of polymers, which form such a second aqueous phase are polyacrylate polymers (including copolymers) polystyrene sulfonate(s), polyvinylpyrrolidones and the like. Examples of polymers, which do not form a second phase but maintain a single phase with the aqueous surfactant-containing phase, are polyethylene glycols, Pluronics (ethylene oxide polymers and copolymers with propylene oxide, cellulosic polymers, and the like.

21. Concerning the surfactant, Fuller teaches in column 3 the following:

(8) The surfactant containing aqueous phase has any surfactant or mixtures thereof which can be employed in a cleansing composition. There is a skin cleansing effective amount of a surfactant present in the composition. Soap, a long chain alkyl or alkenyl, branched or normal carboxylic acid salt such as sodium, potassium, ammonium or substituted ammonium salt can be present in the composition. Exemplary of long chain alkyl or alkenyl are from about 8 to about 22 carbon atoms in length, specifically about 10 to about 20 carbon atoms in length, more specifically alkyl and most specifically normal, or normal with little branching. Small quantities of olefinic bond(s) may be present in the predominantly alkyl sections, particularly if the source of the "alkyl" group is obtained from a natural product such as tallow, coconut oil and the like. Because of its potential harshness soap is not a preferred surfactant and can be omitted from the composition.

(9) Other surfactants can be present in the composition as well. Examples of such surfactants are the anionic, amphoteric, nonionic and cationic surfactants. Examples of anionic surfactants include but are not limited to

Art Unit: 1751

alkyl sulfates, anionic acyl sarcosinates, methyl acyl taurates, N-acyl glutamates, acyl isethionates, alkyl sulfosuccinates, alkyl phosphate esters, ethoxylated alkyl phosphate esters, trideceth sulfates, protein condensates, mixtures of ethoxylated alkyl sulfates and the like.

22. Concerning the electrolyte and the third phase, Fuller teaches in column 7 the following:

(42) The quantity of metallic salts which can be employed as thickening agent for the polymer phase is at least about 0.5 or 0.75 wt % of the composition. Generally, levels above about 3 or 2.5 wt % of the composition should not be exceeded.

(43) When three phases are present, surfactant phase, first polymer phase (heavy polyvinylpyrrolidone [PVP]), and second polymer phase (other polymers), the first polymer phase is thickened by utilizing higher molecular weight PVP.

23. Concerning the "color", Fuller teaches in column 8 the following:

(57) Other functional materials can also represent in the composition, for example, antimicrobial agents, preservatives, UV stabilizers, colorants, solid materials for exfoliative purposes or physical appearance and the like. Of these, the more interesting are materials which will significantly partition between the phases or gather together at the interface of the two major layers. With respect to the colorants, the following coloring agents can be found in significant quantities in the polymer phase: Yellow #5, #6, #10; Red #4; Blue #1. The following colorants are significantly soluble in the surfactant phase: Violet #2, Orange #4 and Green #5 (all FD&C or D&C notation).

(58) Enough colorant should be employed to provide color and intensity desired. These are well known in the art.

(59) With respect to the solid particles insoluble in the phases virtually any particle can be used for its color, shape or desired exfoliative or other function. However, the density of the particle should be such that it is present primarily, desirably almost exclusively at the interface of the layers or even more desirably suspended relatively uniformly throughout at least one of the layers. Generally, the alginates density are such that they are desirably employed in the composition and gather primarily at the interface of the surfactant layer and polymer layer. Other materials, which can be employed, are polyethylene or polypropylene beads. The quantities are as generally known in the art for the specification function but are generally at least about 0.3, 0.5 or 1.0 wt. % of the composition and are generally not above about 2, 5 or 10 wt. % of the composition. The densities of these materials are desirably from about 1.00 to about 1.08 g/cc or 1.03 to about 1.06.

24. Concerning the amount of surfactant, Fuller teaches in column 7 the following:

Art Unit: 1751

(44) The quantity of surfactant is a cleansing effective amount of surfactant or mixture thereof. Generally, the surfactant should be at least about 5 wt. % of the composition, or desirably at least about 7, 8 or 9 wt. %. The maximum amount is that quantity which remains compatible with the overall properties of the composition. Generally, no more than about 30, 25 or 20 wt. % is exceeded. For overall foaming, it is desirable to use at least some anionic surfactant. This is usually at least about 20 wt. % of the surfactant mixture. Cationic surfactant(s) can be omitted if desired.

25. Concerning the hydrotrope, Fuller teaches the use of hexylene glycol in several examples.

Noting that such compounds are well-known hydrotropes as taught in the following paragraph by Person Hai et al (US 5,723,418)

The preferred hydrotropes are di-functional alcohols such as alkyl glycols. One compound which has found heightened efficacy in stabilization of the concentrate and its use solution is hexylene glycol. Generally, the concentration of the hydrotrope ranges from about 0.1 to 40 wt-%, and preferably about 1 to 25 wt-% in the concentrate. In one of the more preferred aspects of the invention, the hydrotrope is present in a concentration ranging from about 3 wt-% to 10 wt-% and comprises hexylene glycol.

26. Claims 1-8, 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams et al (US 6,429,177).

27. Concerning the separate layers, Williams teaches in the abstract the following:

(2) The present invention relates to a cleansing system comprising a transparent or translucent package and an aqueous, personal product multi-phase cleansing composition. Specifically, when left standing, the composition comprises at least two visibly distinct aqueous phases and when agitated, the liquid aqueous phases are dispersible in one another and take on the appearance and lather properties of a conventional liquid personal wash composition (e.g. shower gel). When left to stand, the composition separates into two or more visibly distinct aqueous phases in a maximum period of 24 hours. The compositions of the invention may find application as body wash, shower gel, foam bath or shampoo i.e. as any liquid personal cleansing composition.

28. Concerning the surfactant, the hydrotrope, electrolyte and phase ratios, Williams teaches in columns 2-3 the following:

(23) The composition comprises: a) 5 to 35 wt % of a surfactant selected from the group comprising anionic surfactants, amphoteric surfactants, nonionic surfactants, cationic surfactants and their mixtures b) 1 to 12 wt % of a

Art Unit: 1751

thickener c) 4 to 25 wt % of a polyalkylene glycol, and d) non-chelating mineral salt selected from the group comprising alkali metal or alkaline earth sulfates, bisulfates, carbonates, bicarbonates, phosphates and their mixtures wherein said non-chelating mineral salt is present in an amount sufficient to induce a separation of said aqueous composition into at least two distinct aqueous layers that are present in a volume ratio of upper to lower phase of from 4:1 to 1:4.

29. Concerning the hydrotrope, Williams teaches in column 11 the following:

(92) In addition to the ingredients noted above, the compositions of the invention may contain hydrotropes including but not limited to short chain monohydric or dihydric alcohols, xylene sulphonate and hexylene glycol whose purpose is to avoid the formation of liquid crystal phases resulting from the separation of the surfactant material into the upper phase hence increasing its apparent concentration.

30. Concerning the ratio of surfactants, Williams teaches in table 3 composition meeting the required ratio.

31. Claims 1, 7, 8, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gipp (US 4,530,781).

32. Concerning the layers, the intended laundry use, the electrolyte and water, Gipp teaches in column 2 the following:

(14) The laundry prespotting compositions of the present invention comprise a metastable laundry prespotting composition having from 0.25 to 10% by weight of a chelating agent; from about 1 to 35% by weight of at least one nonionic surfactant, said surfactant having HLB such that the combined HLB of the surfactants is within the range of from 9 to 13; from about 5 to 60% by weight of a solvent and the balance of the composition comprising water wherein the composition has a pH within the range of from 4.5 to 12.2.

(15) By the term "metastable" is meant a liquid composition which tends to separate into at least two phases but upon shaking forms a substantially uniform composition which remains substantially uniform for at least about 15 minutes.

33. Concerning the amount of electrolyte, Gipp teaches in column 2 the following:

Art Unit: 1751

(18) Typically the chelating agents are present in the composition of the present invention in an amount of from about 0.25 to 10% by weight. It is within this weight range that the optimum cleaning and prespotting efficiency is obtained. It is preferred that the chelating agents be present in the amount of from about 1.0 to 6% by weight and preferable from 1.5 to 4.0% by weight.

(19) The chelating agents, especially the EDTA, DTPA, and HEDTA types, can be added to the composition of the present invention in the salt form, which is preferred since the salts are water soluble, or in the water insoluble free acid form. If the chelating agents are added in the free acid form, the free acids must be at least partially neutralized to make them water soluble and form the chelating agent salts in situ. Suitable bases to neutralize the free acids are sodium hydroxide, potassium hydroxide and ammonium hydroxide. Sufficient base is added to solubilize the free acid chelating agent and to bring the pH of the composition within the range of about 4.5 to 12.2.

34. Concerning the nonionic surfactant, Gipp teaches in column 3 the following:

(21) The composition of the present invention also include at least one nonionic surfactant. A single nonionic surfactant having an appropriate HLB can be utilized or mixtures of nonionic surfactants such that the HLB of the resulting mixture of nonionic surfactants is within the appropriate range. It has generally been found that the nonionic surfactant or mixture of nonionic surfactants should have an HLB within the range of from 9 to 13 for optimum efficiency. It is preferred that HLB be between 10 and 12. The optimum HLB range is from 10.5 to 11.5.

(22) Suitable nonionic surfactants include the ethoxylated nonyphenols such as the Surfonic N series available from Texaco Chemicals; and the ethoxylated octylphenols including the Triton X series available from Rohm & Haas; the ethoxylated secondary fatty alcohols such as the Tergitol series available from Union Carbide; the ethoxylated primary fatty alcohols such as the Neodols available from Shell Chemicals; the ethoxylated sorbitan fatty acid esters such as the Tweens from ICI America and the sorbitan fatty acid esters such as the Spans from ICI America.

35. Claims 1, 3, 6, 7, 8, 11, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Weimer (US 3,718,609).

36. Concerning the multiple layers, Weimer teaches in column 1 the following:

(5) In the liquid detergent field, such as shampoos, the present trend is to produce a multi-phase product which, when shaken, forms a temporary emulsion. In such formulations, the lower phase is an aqueous phase which contains the necessary cleaning ingredients, and the upper phase is an oil material which conditions the hair. Further, similar compositions are employed as bubble bath/bath oil compositions, the basic distinction between the shampoo

Art Unit: 1751

formulations and the bubble bath/bath oil compositions being in the proportion of oil in the upper phase.

37. Concerning the ratio of layers, Weimer teaches in columns 2-3 the following:

(5) The multi-phase liquid detergent compositions preferably contain at least 5 percent by weight of one or more water-immiscible oily materials. Although in certain cases amounts up to 50 percent may be used, the amount of oily material usually will not be more than 50 percent. In the composite shampoo/hair conditioning compositions the amount of oily material is desirably from 5 to 20 percent by weight, while in the composite bubble bath/bath oil compositions the amount of oily material will usually be at least about 20 percent by weight. The oily material serves as a skin softener or emollient and as a hair conditioner or hair grooming aid.

38. Concerning the surfactant, Weimer teaches in column 3 the following:

(7) As previously mentioned, the aqueous phase of the multi-phase liquid detergent composition contains a foam-producing water-soluble organic detergent, a non-emulsifying foam stabilizer, and water. The amount of foam-producing water-soluble organic detergent employed can vary widely depending upon the particular formulation desired and its use. Generally, however, the foam-producing water-soluble organic detergent will be present in an amount within the range of from about 5 to 40 percent by weight, based on the total weight of the aqueous phase.

39. Concerning the electrolyte, the water, and the dye, Weimer teaches in column 4 the following:

(11) The second essential ingredient of the composition which is present in the aqueous layer is the non-emulsifying foam stabilizer. The amount of the non-emulsifying foam stabilizer can vary widely but is generally present in an amount of from about 2 to about 10 percent by weight based upon the total weight of the aqueous phase of the composition. Desirable results have been obtained wherein the non-emulsifying foam stabilizer is present in the amount of about 3 to 5 weight percent. The non-emulsifying foam stabilizers which can be employed in the composition of the present invention are the water-soluble salts of acrylic acid polymers. This acrylic acid polymers can be represented by the structural formula

(12) wherein x is an integer from about 550 to about 2,250. The polymers are neutralized to form a salt and the cation constituent of the salt is selected from the group consisting of sodium, magnesium, ammonium, mono-, di-, and triethanolamine. Especially desirable results have been obtained wherein the salt is the sodium salt or the triethanolamine salt and the molecular weight of the resulting acrylate is from about 50,000 to about 150,000 with the lower

Art Unit: 1751

molecular weight polymer being the most desired.

(13) The third essential ingredient in the aqueous phase is water and the amount will vary depending upon the amount of the foam producing organic detergent and non-emulsifying foam stabilizer employed. In addition, the amount of water in the total composition will vary depending upon the amount of oily material present in the total composition.

(14) While the compositions of the invention contained the above-mentioned ingredients, other compatible adjuvants can also be included therein. Thus the composition may, for example, contain one or more of the following: a perfume or essential oil, an oil-soluble or water-soluble dye, a germicide, a protein hydrolysate, and the like.

Double Patenting

40. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

41. Claims 1-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,521,581. Although the conflicting claims are not identical, they are not patentably distinct from each other because the prior art teaches not only the package but also the composition. The composition contained within this package clearly reads on the instant composition.

Conclusion

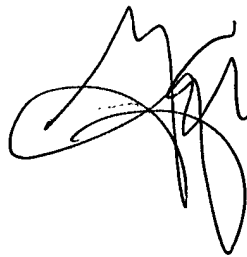
Art Unit: 1751

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 703-305-4945.

The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 703-308-4708. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

A handwritten signature in black ink, appearing to be 'Gregory E. Webb', with a stylized, cursive script.

Gregory E. Webb
Primary Examiner
Art Unit 1751

gw